

Remarks

Claims 1-20 are pending.

Claims 1-19 were rejected by the Examiner. Claim 20 was objected to but would be allowable if rewritten in independent form, including all of the limitations of the base claim and any intervening claims.

Applicants draw the Examiner's attention to claim 13, which has similar subject matter to claim 20. Claim 13 is not mentioned in the office action. Applicant has assumed that claim 13 should have been objected to for being based upon a rejected base claim.

The specification was objected to for informalities which are corrected by this amendment. The drawings were objected to and proposed amendments to the drawings are set out in the replacement sheets attached at the end of this response.

Claims 2 and 10-13 were rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to claim 2, Applicant is unsure that the Examiner's objection is understood. The office action states, "Claim 1 recites the limitation that second pseudo-noise code is a time-reversed version of the first pseudo-noise code. Claim 2 further limits that transmitting a second pseudo-noise code further comprising transmitting a second pseudo-noise code that is bit-wise inverted from the first pseudo-noise code. Since the second pseudo-noise code is already time reversed of the first code in claim 1, *doing the bit-wise inverted form the first pseudo-noise code in claim 2 will convert the time reversed pseudo-noise code 2 into a bit-wise inverted version of pseudo-noise code without the time reverse.*

Applicant is not sure to what the Examiner objects. Is it the Examiner's position that the language of the claim needs to be changed? Applicant's respectfully request some clarification.

Further, it is not necessarily true that bit-wise inversion of a time reversed first code will result in a bit-wise inversion of the first code. Using the example of the code from the specification, assume the first code is 00110101.

| | | |
|--|----------|---|
| Original code | 00110101 | 00110101 |
| Time reversed (2 nd code) | 10101100 | Bit-wise inverted (1 st) 11001010 |
| Bit-wise inverted (2 nd code) | 01010011 | |

Therefore, the bit-wise inversion of the time reverse code *is not the same* as a bit-wise inversion of the original code.

Applicant therefore requests withdrawal of this rejection with regard to claim 2.

With regard to claim 10, the language to which the Examiner objected is now part of claim 8. However, Applicant has clarified the language with regard to the code storage in claim 8, and withdrawal of this rejection is requested.

Claims 1, 2, 4 and 5 were rejected under 35 USC 102(e) as being anticipated by Mayrargue (US Pub. 2004/0234005).

Mayrargue is directed to a multi-transmitter environment where multiple antenna are transmitting the same code and need to do so in a manner that a receiver can detect the superposition of multiples of the same code to extract the code itself [0081-0089] free of interferences in the code [0136]. Further, each symbol is encoded separately with two code pairs, so the bit rate is half the transmission rate [0175].

Claim 1, as amended, requires that the pseudo-noise codes have a relationship between them that allows transmission of two bits of data for every one transmission of the code pairs. This is disclosed in the specification on page 9, lines 11-25, as an example. Mayrargue does not

teach, show or suggest such a relationship, and actually teaches away from this requirement, see paragraph 0175, referenced above.

Claims 2, 4 and 5 depend from claim 1 and inherently includes all of the limitations of the base claim. As discussed above, the prior art does not teach the limitations of the base claim much less the further embodiments of the dependent claims.

Applicant therefore submits that claims 1, 2, 4 and 5 are patentably distinguishable over the prior art and allowance of these claims is requested.

Claim 8 was rejected under 35 USC 102(b) as being anticipated by Sugita et al. (US 5,862,172).

Sugita teaches a system in which two pseudo-noise (PN) codes are received in a first portion of a signal. However, these two codes themselves are not compared. The office action refers to the detected signals. The codes themselves are S20 and S21 [col. 5, lines 51-57]. The detected signal S28 and S29 are not generated as a result of a comparison of the codes between themselves. The signals S28 and S29 result from a detection of the codes at an incoming signal. S28 results from a detection of the first PN code and the S29 results from a detection of the second PN code [col. 5, 53-57]. The comparison of these two signals results in the signal S42 [col. 7, 39-42]. Therefore, this is not a comparison of the two codes against each other.

Further, the match is not between the first and second PN codes as relates to a match count peak at detectors 47A to 47G. The signals S45A to S45G are the signals generated to compare the individual first and second codes against a first received portion of a synchronizing signal, not against each other, col. 7, line 60 through col. 8, line 13.

Therefore, Sugita does not teach a system in which the PN codes are compared against each other. As this is required by claim 8, it is therefore submitted that claim 8 is patentably distinguishable over the prior art and allowance of this claim is requested.

Claim 3 is rejected under 35 USC 103(a) as being unpatentable over Mayrargue in view of Sugita et al.

As stated above, Mayrargue does not teach the invention as claimed in claim 1, much less the further features of claim 3. Sugita does not overcome this deficiency. It is therefore submitted that claim 3 is patentably distinguishable over the prior art and allowance of this claim is requested.

Claim 6 was rejected under 35 USC 103(a) as being unpatentable over Mayrargue in view of Partyka (US 6,925,105).

As stated above, Mayrargue does not teach the invention as claimed in claim 1, much less the further features of claim 6. Partyka does not overcome this deficiency. It is therefore submitted that claim 6 is patentably distinguishable over the prior art and allowance of this claim is requested.

Claim 7 was rejected under 35 USC 103(a) as being unpatentable over Mayrargue in view of Varney et al. (US Pub. 2004/0095954).

As stated above, Mayrargue does not teach the invention as claimed in claim 1, much less the further features of claim 7. Varney does not overcome this deficiency. It is therefore submitted that claim 7 is patentably distinguishable over the prior art and allowance of this claim is requested.

Claim 9 was rejected under 35 USC 103(a) as being unpatentable over Mayrargue in view of Poon et al. (US Pub. 2003/0128747).

Applicants are unsure of this rejection. Claim 9 depends from claim 8, not claim 1. The office action references Mayrargue as teaching all of the limitations of claim 1. Applicants believe the Examiner intended that the rejection be Sugita in view of Poon.

Regardless, as stated above, Sugita does not teach the elements of claim 8, much less the feature of claim 9. Poon does not overcome this deficiency. It is therefore submitted that claim 9 is patentably distinguishable over the prior art and allowance of this claim is requested.

Claim 14 is rejected under 35 USC 103(a) as being unpatentable over Sugita et al. in view of Kurihara et al. (US 4,943,975).

However, claim 20 was objected to for being based upon a rejected base claim and would be allowable if rewritten to include all of the limitations of the base claim. In the alternative, Applicants have rewritten claim 14 to include all of the limitations of the objected to claim and the intervening claim 19.

Applicant therefore submits that claim 14 is now in allowable form and requests allowance of that claim.

Claim 17 was rejected under 35 USC 103(a) as being unpatentable over Sugita et al. in view of Kurihara et al. as applied to claim 14 and further in view of Poon et al. (US Pub. 2003/0128747).

As stated above, claim 14 from which this claim depends is now in allowable form. It is therefore submitted that claim 17 is patentably distinguishable over the prior art and allowance of this claim is requested.

Claim 18 was rejected under 35 USC 103(a) as being unpatentable over Sugita et al. in view of Kurihara et al. as applied to claim 14 and further in view of Roth (US 4,032,885).

As stated above, claim 14 from which this claim depends is now in allowable form. It is therefore submitted that claim 18 is patentably distinguishable over the prior art and allowance of this claim is requested.

Claim 19 was rejected under 35 USC 103(a) as being unpatentable over Sugita et al. in view of Kurihara et al. as applied to claim 14 and further in view of Harms et al. (US 6,493,376).

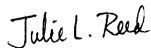
As stated above, claim 14 from which this claim depends is now in allowable form. It is therefore submitted that claim 19 is patentably distinguishable over the prior art and allowance of this claim is requested.

The prior art made of record and not relied upon has been reviewed and is not considered pertinent to Applicant's disclosure. No new matter has been added by this amendment. Allowance of all pending claims is requested. The Examiner is encouraged to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

Customer No. 20575

Respectfully submitted,

MARGER JOHNSON & McCOLLOM, P.C.



Julie L. Reed
Reg. No. 35,349

210 S.W. Morrison Street, Suite 400
Portland, Oregon 97204
503-222-3613